FACT SHEET

UNITED STATES AIR FORCE

Technology Application and Insertion Programs

The Air Force Technology Transition Office (TTO) is the sole agency responsible for providing integrated management for a group of AFMC Technology Application and Insertion Programs (A/I). These programs were created to ensure that *technology products or processes* developed by Air Force Laboratories, Test Centers, Air Logistics Centers, or industry are further *developed and integrated into a new or fielded Air Force system.*

In support of the Technology Master Process and in order to coordinate this effort, the TTO has developed and manages a process to review application and insertion technology requirements/needs, and match those with the appropriate A/I program. As part of this process, the TTO leads the A/I Review Board which prioritizes the requirements. In turn, the TTO helps implement the approved list of projects, and assigns the management of specific projects to a Product, Logistic, or Test Center.

The AFMC Technology A/I Programs currently under TTO purview are:

- **Aging Aircraft.** The Aging Aircraft office was established under ASC/SM to develop a plan to address how RDT&E dollars are spent on aging aircraft since we will procure fewer new aircraft in foreseeable future. They find ways to funds for requirements unique to sustaining aging aircraft.

- **Air Force Communications Agency.** The Air Force Communications Agency technology insertion process was developed to help identify new and emerging Commercial-Off-The-Shelf technologies, assess their capabilities, and match appropriate technologies with Air Force and DoD C41 requirements and needs. The long range goal of the Air Force Communications Agency is to provide every Air Force decision maker with any information needed instantly, in any format, reliably and securely.

- **Air Force Center for Environmental Excellence.** AFCEE, at Brooks AFB, provides a full range of technical services for Air Force in the ares of Environmental compliance, Pollution Prevention, Hazardous Waste Cleanup, Environmental Planning and Impact Assessments, and Design and Construction Management. A primary goal of AFCEE is to ultimately reduce the use of hazardous materials and release of pollutants into the environment.

- **Air Force Materiel Command/Security Police.** The AFMC/SPO office provides the policy, programs and resources to secure command personnel and mission capabilities to meet war and contingency taskings and combat arms training and maintenance. This office attends the annual technology needs review to identify any tech needs that pertain to the Security Police mission. Those needs identified are submitted directly to SP for resolution.

- **Automatic Identification Technology**. The Air Force AIT Program was recently created by combining the Logistics of Marking and Automated Reader Symbols (LOGMARS) and Microcircuit Technology in Logistics Applications (MITLA) programs, both implemented to reduce the cost of doing business by automating the collection, reading, storage, and transmission of source data. AIT is a broad term used to describe a collection of automated source data collection technologies such as bar coding, voice recognition, radio frequency identification, integrated circuit cards, memory cards, magnetic strips, optical character recognition, and laser cards. The AIT Program promotes and facilitates the implementation of AIT throughout the AF, and provides a unified voice to the AIT industry and for the AF AIT customer.

- **Capital Purchase Program**. CPP provides a responsive avenue for the modernization of AFMC organic industrial base by replacing obsolete equipment, modernizing repair processes and decreasing hazardous environments. CPP funds capital projects in support of existing weapon systems/platforms at Air Logistics Centers, the Aerospace Guidance and Metrology Center, and the Aerospace Maintenance and Regeneration Center.

- **Component Improvement Program**. CIP provides the continuing, sustaining engineering support required to develop and qualify solutions for operational safety, and reliability and maintainability problems for in-service aircraft engines. Other key goals are to reduce cost of engine ownership and to improve operational readiness.

- **Computer Resource Technology Transition.** The CRTT program addresses the problems of acquiring, developing, and supporting emerging computer resources. The program's goal is to identify, develop, and transition to operational use, software engineering tools, techniques, and advanced computer technology. In addition, the program aims to provide user support throughout the lifecycle to: a. Reduce software development and maintenance costs, b. Provide secure, adaptable, reliable, maintainable, and survivable systems, and c. Develop portable and reusable software components applicable Air Force/DOD wide.

- Embedded Computer Resources Support Improvement Program. ESIP provides an infrastructure to assist in the transition of technology to support all categories of embedded computer resources (ECR) throughout their life cycle. It is an Air Force program aimed at improving the products and processes supporting ECR for all MAJCOMS.

- Engine Model Derivative Program. EMDP plans, demonstrates and develops increased capability for existing engines/ propulsion systems. They also monitor development of jet engines for potential future USAF application as well as monitor research and development technology programs for applicability and transition to operational engines.

- **Human Systems Center Environmental Systems Division.** HSC/YAQ's mission is to validate and solve environmentally related problems. The solutions will optimize cost effectiveness and state-of-the-art technology coupled with timely responses. They also work program related funding, cost sharing, and acquisition issues.

- **Management and Equipment Evaluation Program.** MEEP serves as the primary contact between the Air Force and industry to identify and evaluate more effective and economical equipment for transportation and civil engineering. Operating under a "try before you buy" concept, MEEP ensures the government purchases products that are cost-effective, of higher quality, easy to use, environmentally friendly, and increase productivity.

- Productivity Investment Fund. PIF is an OSD-sponsored, tri-service managed program that provides funding for capital investments in equipment and facilities. The funds are used to improve an organization's operations, enhance unit capability and conserve critical resources.

- Productivity, Reliability, Availability and Maintainability. PRAM provides for new applications of proven technologies to improve productivity, reliability, deployability, or maintainability of existing or developing Air Force systems, subsystems, equipment and associated software. Particular emphasis is placed on implementing techniques to employ product use across multiple weapon systems to leverage cost and availability improvements. PRAM funds "off-the-shelf" technology prototyping that will: improve operational and combat readiness, reduce operating and support costs of in-service weapon systems and equipment; improve productivity; and adapt existing equipment to broader applications.

- Robotics and Automation Center of Excellence. RACE inserts appropriate robotics and automation technologies into Air Force industrial processes. RACE accomplishes this mission by keeping abreast of current technology and recommending any technologies that may resolve present or future Air force requirements. RACE is the link between industry, universities, the Department of Energy, NASA, technical societies, contractors and the Air Force. RACE is also responsible for providing organic technical expertise to the Air Force during integration of new robotics and automation system developments.

- Sustainment is an element of the Manufacturing Technology Program involving the implementation of new technologies (where technical feasibility has been proven) in the Air Force Materiel command depot/overhaul maintenance installations. In general, Sustainment applies when the technology for the solution to a depot repair operations problem exists, but a shop floor solution is not commercially available.

- Savings Through Value Enhancement. The SAVE program was initiated by the Defense Logistics Agency to provide funding to DoD components to identify and manage projects on DLA-managed parts which could provide significant payback in reliability/maintainability improvements, value engineering savings or savings through elimination of sole source.

- Small Business Innovation Research. SBIR is designed to stimulate technology innovation among small private-sector businesses while providing the government new, cost-effective technical and scientific solutions to challenging problems. At the same time, SBIR encourages small businesses to market the SBIR technology in the private sector to help stimulate the U.S. economy. SBIR is structured in three phases: I - Establish the feasibility and technical merit of a proposed innovation; II - Conduct major research and development; and III - Complete the development of a product to make it available for sale or license.

The TTO interfaces with these programs to preclude duplication of projects and to promote all functions within the Technology Master Process. We promote the application of successful programs/projects AF and DOD wide. The TTO continues to expand its role in the technology application and insertion arena by adding additional programs to its portfolio.

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